WHAT IS CLAIMED IS:

1. A sensor device comprising:

a circuit chip;

an adhesion film; and

a sensor chip mounted on the circuit chip through the adhesion film,

wherein the sensor chip includes:

a substrate having foreside and backside surfaces;

a concavity disposed on the backside surface of the substrate; and

a membrane disposed on the foreside surface of the substrate so that the membrane covers the concavity, and

wherein the adhesion film is disposed between the sensor chip and the circuit chip so as to form a passage for connecting between the concavity and an outside of the concavity.

2. The device according to claim 1,

wherein the adhesion film is disposed on a periphery of the concavity, and includes a notch for providing the passage.

3. The device according to claim 1,

wherein the adhesion film is made of adhesive film including silicone resin, polyimide resin, or epoxy resin.

4. The device according to claim 1,

wherein the sensor chip is adhered to the circuit chip except for the passage of the adhesion film, and

wherein the membrane is covered the concavity air-tightly.

5. The device according to claim 1,

wherein the sensor chip provides an infrared sensor, a pressure sensor, a gas sensor or a flow sensor.

6. The device according to claim 1,

wherein the sensor chip having the concavity is mounted on the circuit chip through the adhesion film so that the device provides a stack structure.

7. The device according to claim 1,

wherein the sensor chip is made of silicon.

8. The device according to claim 1,

wherein the adhesion film has a predetermined thickness, which provides the passage so that an air in the concavity sufficiently passes through the passage.

9. A method for manufacturing the sensor device according to claim 1, the method comprising the step of:

forming the passage in the adhesion film; and

adhering the sensor chip to the circuit chip through the adhesion film.

10. The method according to claim 9,

wherein the adhesion film is disposed on a periphery of the

concavity, and includes a notch for providing the passage.

11. The method according to claim 9,

wherein the adhesion film is made of adhesive film including silicone resin, polyimide resin, or epoxy resin.

12. The method according to claim 9,

wherein the sensor chip is adhered to the circuit chip except for the passage of the adhesion film, and

wherein the membrane is covered the concavity air-tightly.

13. The method according to claim 9,

wherein the sensor chip provides an infrared sensor, a pressure sensor, a gas sensor or a flow sensor.

14. The device according to claim 9,

wherein the sensor chip having the concavity is mounted on the circuit chip through the adhesion film so that the device provides a stack structure.

15. The device according to claim 9,

wherein the sensor chip is made of silicon.

16. The device according to claim 9,

wherein the adhesion film has a predetermined thickness, which provides the passage so that an air in the concavity sufficiently passes through the passage.